

Appl. No. 10/045,346
Amdt. Dated 12/03/2004
Reply to Office Action of 10/04/2004

APP 1459

Listing of Claims:

Claim 1 (previously amended) A system for enabling a telephone subscriber to switch an on-going telephone call between wireline services provided through a central office in the public switched telephone network and cellular services provided by a mobile switching center in a cellular network after the telephone call has been initially routed to the telephone subscriber, said system comprising:

a routing table for identifying specific telephone subscribers entitled to switch on-going telephone calls between wireline and wireless services,

a look-up table identifying the correspondence of said one telephone subscriber's wireline and cellular telephone numbers,

a monitor circuit responsive to a unique signal during the on-going telephone call that has already been established to the telephone subscriber from said one specific telephone subscriber indicating a desired transfer of said on-going telephone call between said one specific telephone subscriber's wireline and cellular telephones, and

switch means responsive to said monitor circuit for effecting said transfer of said on-going telephone call.

Claim 2 (previously amended) The system for enabling a telephone subscriber to switch an on-going telephone call between wireline services provided through a central office in the public switched telephone network and cellular services provided by a mobile switching center in a cellular network in accordance with claim 22 wherein said look-up table is in said mobile switching center.

Claim 3 (previously amended) The system for enabling a telephone subscriber to switch an on-going call between wireline services provided through a central office in the public switched telephone network and cellular services provided by a mobile switching center in a cellular network in accordance with claim 22 and further comprising:

a fixed cellular mobility agent associated with said mobile switching center, said fixed mobility agent having switching and signaling capabilities, and wherein

said routing table is in said central office, an incoming call to one of said specific telephone subscribers being routed to said fixed mobility agent in response to an output of said routing table when said incoming call is addressed to said one subscriber's third number,

said fixed mobility agent obtaining from said look up table said one subscriber's cellular telephone number, and

said look up table, said monitor circuit, and said switch means are in said fixed cellular mobility agent.

Claim 4 (canceled)

Claim 5 (previously amended) A method for enabling a telephone subscriber to switch an on-going telephone call between wireless services provided through a central office in the public switched network

Appl. No. 10/045,346
Amdt. Dated 12/03/2004
Reply to Office Action of 10/04/2004

APP 1459

and cellular services provided by a mobile switching center in a cellular network after the telephone call has been initially routed to the telephone subscriber, said method comprising the steps of:

identifying in a routing table in the central office specific telephone subscribers entitled to switch telephone calls between wireline and cellular services;

providing a correspondence between said specific subscriber's wireline and cellular telephone numbers;

monitoring a signal from one of said specific telephone subscribers during the existence of an on-going telephone call that had previously been established to said specific subscriber to initiate a call transfer between said subscriber's wireline and cellular telephones; and

enabling a switch to effect the transfer in response to said monitored signal.

Claim 6 (previously amended) The method for enabling a telephone subscriber to switch an on-going telephone call between wireline services provided through a central office in the public switched telephone network and cellular services provided by a mobile switching center in a cellular network in accordance with claim 5 wherein said correspondence of said specific subscriber's wireline and cellular telephone numbers is contained in a look-up table in the mobile switching center.

Claim 7 (original) The method in accordance with claim 6 wherein said enabling step is performed by said mobile switching center.

Claim 8 (previously amended) The method for enabling a telephone subscriber to switch an on-going telephone call between wireline services provided through a central office in the public switched network in accordance with claim 5 wherein said correspondence between said specific subscriber's wireline and cellular telephone numbers is contained in a look-up table in a fixed cellular mobility agent associated with said mobile switching center, said monitoring step and said switch enabling step being performed by said fixed cellular mobility center.

Claim 9 (canceled)

Claim 10 (currently amended) A method for enabling a telephone subscriber to switch an on-going telephone call between wireline services provided through a central office in the public switched telephone network to the subscriber's wireline telephone and cellular services provided by a mobile switching center in a cellular network to the subscriber's cellular telephone after the telephone call has been initially routed to the telephone subscriber, said method comprising the steps of:

establishing a call connection to one of said subscriber's telephones,

monitoring said call connection to a subscriber entitled to switch calls between that subscriber's wireline and cellular telephones to detect a request signal for such a transfer;

obtaining the telephone number of the other of said subscriber's wireline and cellular telephones not presently engaged in the telephone call; and

responsive to a signal from said subscriber during the already established connection to said one of said subscriber's telephones, switching the telephone call to said other of said subscriber's wireline or

Appl. No. 10/045,346
Amdt. Dated 12/03/2004
Reply to Office Action of 10/04/2004

APP 1459

cellular telephones and terminating the connection to said one of said subscriber's wireline or cellular telephones.

Claim 11 (original) The method in accordance with claim 10 wherein said call connection to said subscriber is through a mobile switching center.

Claim 12 (original) The method in accordance with claim 11 wherein said connection to said subscriber is through a fixed cellular mobility agent and said monitoring step alerts said fixed cellular mobility agent to said request.

Claim 13 (original) The method in accordance with claim 12 wherein said establishing, switching, and terminating steps are performed by said fixed cellular mobility agent.

Claim 14 (previously amended) A system for enabling a telephone subscriber to switch an on-going call between wireline services provided through a central office in the public switched telephone network and cellular services provided by a mobile switching system center in a cellular network after the telephone call has been initially routed to the telephone subscriber, said system comprising:

a fixed cellular mobility agent having the functionality of a central office and coupled to said mobile switching center, said fixed cellular mobility agent comprising

means for establishing a connection to one of a subscriber's wireline and cellular telephones;

means for monitoring and detecting a request from said one subscriber during said already established connection to transfer the call connection to the other of said subscriber's wireline or cellular telephones, and

means for switching the connection in response to said detected request.

Claim 15 (canceled)

Claim 16 (previously amended) A method for enabling a telephone subscriber to switch an already established on-going telephone call to one of the subscriber's wireline and cellular telephones to the other of the subscriber's telephones, said subscriber wireline and cellular telephones being assigned different telephone numbers, said method comprising the steps of

monitoring a call connection to one of said subscriber's telephones to detect a request by said subscriber to switch the already established on-going connection between said subscriber's telephones,

obtaining the telephone number of said other of said subscriber's telephones,

initiating an outgoing call from said other of said subscriber's telephones,

establishing a connection to said other of said subscriber's telephones, and

bridging the connections to said one and said other of said subscriber's telephones and terminating the connection to said one of said subscriber's telephones.

Appl. No. 10/045,346
Amdt. Dated 12/03/2004
Reply to Office Action of 10/04/2004

APP 1459

Claim 17 (original) The method in accordance with claim 16 further comprising

alerting a mobile switching center in a cellular network of the detection of said request by said monitoring step and wherein

said initiating step is affected by said mobile switching center.

Claim 18 (original) The method in accordance with claim 17 wherein said connection to said one telephone of said subscriber is through said mobile switching center.

Claim 19 (original) The method in accordance with claim 16 further comprising alerting a fixed cellular mobility agent of the detection of said request by said monitoring step and wherein

said initiating step is affected by said fixed cellular mobility agent.

Claim 20 (original) The method in accordance with claim 19 wherein said connection to said one telephone of said subscriber is through said fixed cellular mobility agent.

Claim 21 (canceled)

Claim 22 (previously added) The system in accordance with claim 1 wherein said look-up table identifies the correspondence between said one telephone subscriber's wireline telephone number, said cellular telephone number, and a third number for calls to said one subscriber's cellular telephone that can be transferred during the on-going telephone call to said one subscriber's fixed telephone.

Claim 23 (previously added) The method in accordance with claim 8 wherein said look-up table contains the correspondence between said wireline and cellular telephone numbers and a third number for calls to said one subscriber's cellular telephone that can be transferred during the on-going telephone call to said subscriber's wireline telephone.

Claim 24 (cancelled)